

ABSTRACT OF THE DISCLOSURE

A ferroelectric capacitor in a semiconductor device is constructed of a Pt lower electrode, a ferroelectric thin film and a Pt upper electrode that are successively laminated onto a silicon substrate. The ferroelectric thin film is constructed of a plurality of SBT layers. Crystal grains of the SBT layer are formed smaller than the crystal grains of the SBT layers. The SBT layer having small size grains improves the electrical characteristics and the ferroelectric characteristics of the ferroelectric capacitor.